

SILVER HALIDE PHOTOGRAPHIC EMULSION AND PHOTOGRAPHIC ELEMENT COMPRISING IT

CLAIMS

1. A silver halide emulsion which comprises silver halide tabular grains showing an average thickness lower than $0.15\text{ }\mu\text{m}$, an average diameter of at least $1.20\text{ }\mu\text{m}$ and an average aspect ratio of at least 8:1 dispersed in a hydrophilic colloid mixture comprising from 10% to 30% by weight of dextran, from 20% to 40% by weight of a hydrogenated polysaccharide having an average molecular weight equal to or lower than 10,000, and from 40% to 60% by weight of gelatin.

2. The silver halide emulsion of claim 1, characterized in that said hydrophilic colloid mixture comprises from 15% to 25% by weight of said dextran, from 25% to 35% by weight of said hydrogenated polysaccharide, and from 45% to 55% by weight of said gelatin.

3. The silver halide emulsion of claim 1, characterized in that said hydrophilic colloid mixture comprises an amount of said dextran of from 5 to 100 grams per mole of silver, an amount of said hydrogenated polysaccharide of from 10 to 100 grams per mole of silver, and an amount of said gelatin of from 30 to 200 grams per mole of silver.

4. The silver halide emulsion of claim 1, characterized in that said hydrophilic colloid mixture comprises an amount of said dextran of from 10 to 80 grams per mole of silver, an amount of said hydrogenated polysaccharide of from 20 to 80 grams per mole of silver, and an amount of said gelatin of from 50 to 150 grams per mole of silver.

5. The silver halide emulsion of claim 1, characterized in that said hydrophilic colloid mixture comprises an amount of said dextran of from 20 to 40 grams per mole of silver, an amount of said hydrogenated polysaccharide of from 40 to 60 grams per mole of silver, and an amount of said gelatin of from 60 to 120 grams per mole of silver.

6. The silver halide emulsion of claim 1, characterized in that said tabular grains have an average thickness within the range of from 0.05 to 0.15 μm .

7. The silver halide emulsion of claim 1, characterized in that said tabular grains have an average diameter of at least 1.40 μm .

8. The silver halide emulsion of claim 1, characterized in that said tabular grains have an average aspect ratio of from 8:1 to 50:1.

9. A silver halide photographic element comprising a support, at least one silver halide emulsion layer coated on at least one side of said support, and at least one protective layer coated over said emulsion layer, said emulsion layer comprising a silver halide emulsion which comprises silver halide tabular grains showing an average thickness lower than 0.15 μm , an average diameter of at least 1.20 μm and an average aspect ratio of at least 8:1 dispersed in a hydrophilic colloid mixture comprising from 10% to 30% by weight of dextran, from 20% to 40% by weight of a hydrogenated polysaccharide having an average molecular weight equal to or lower than 10,000, and from 40% to 60% by weight of gelatin.

10. The silver halide photographic element of claim 9, characterized in that said hydrophilic colloid mixture comprises from 15% to 25% by weight of said dextran, from 25% to 35% by weight of said hydrogenated polysaccharide, and from 45% to 55% by weight of said gelatin.

11. The silver halide photographic element of claim 9, characterized in that said hydrophilic colloid mixture comprises a dextran amount of from 5 to 100 grams per mole of silver, a hydrogenated polysaccharide amount of from 10 to 100 grams per mole of silver, and a gelatin amount of from 30 to 200 grams per mole of silver.

12. The silver halide photographic element of claim 9, characterized in that said hydrophilic colloid mixture comprises a dextran amount of from 10 to 80 grams per mole of silver, a hydrogenated polysaccharide amount of from 20 to 80 grams per mole of silver, and a gelatin amount of from 50 to 150 grams per mole of silver.

13. The silver halide photographic element of claim 9, characterized in that said hydrophilic colloid mixture comprises a dextran amount of from 20 to 40 grams per mole of silver, a hydrogenated polysaccharide amount of from 40 to 60 grams per mole of silver, and a gelatin amount of from 60 to 120 grams per mole of silver.

14. The silver halide photographic element of claim 9, characterized in that said tabular grains have an average thickness within the range of from 0.05 to 0.15 μm .

15. The silver halide photographic element of claim 9, characterized in that said tabular grains have an average diameter of at least 1.40 μm .

16. The silver halide photographic element of claim 9, characterized in that said tabular grains have an average aspect ratio of from 8:1 to 50:1.